Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 36 (Canceled)

37. (New) An antenna system comprising:

an antenna element for transmitting and receiving signals at radio frequencies;

an antenna connector for establishing a signal connection between the antenna element and a radio component; and

an electronic serialization component for indicating at least one predetermined antenna characteristic, and adapted to read out the at least one predetermined antenna characteristic through the antenna connector to the radio component is coupled between the antenna element and the antenna connector;

wherein the electronic serialization component comprises a circuit, the at least one predetermined antenna characteristic is coded into the circuit;

wherein the circuit comprises a threshold detection circuit for detecting a predetermined voltage threshold, corresponding to a predetermined antenna gain; and

wherein the electronic serialization component is reprogrammable to allow a change of a value of the at least one predetermined antenna characteristic.

38. (New) The antenna system of claim 37, wherein the at least one predetermined antenna characteristic is selected from a group consisting of operational frequency band, product model number and type of connection.

39. (New) The antenna system of claim 38, wherein the circuit comprises a semiconductor memory chip.

40. (New) The antenna system of claim 38, wherein the antenna element comprises a plurality of antenna elements in an antenna array.

41. (New) A wireless communication device comprising:

a radio component for exchanging wired electronic signals with wireless signals;

an antenna system comprising:

an antenna element for respectively transmitting and receiving at radio frequencies the wireless signals exchanged with the radio component;

an antenna connector for establishing a signal connection between the antenna and the radio component; and

an electronic serialization component for indicating predetermined antenna characteristics, and adapted to read out the predetermined antenna characteristics through the antenna connector to the radio component;

wherein the electronic serialization component is coupled between the antenna connector and the antenna element and is responsive to a remote signal to change a value of a selected predetermined antenna characteristic; and

wherein the electronic serialization component comprises a circuit, wherein the predetermined antenna characteristics are coded into the circuit, the circuit comprises a threshold detection circuit for detecting a predetermined voltage threshold, corresponding to a predetermined antenna gain.

42. (New) The wireless communication device of claim 41, wherein the predetermined antenna characteristics include one of a group consisting of operational frequency band, product model number, maximum output power and type of connection.

43. (New) The wireless communication device of claim 41, wherein the circuit comprises a semiconductor memory chip.

44. (New) The wireless communication device of claim 41, wherein the antenna element comprises a plurality of antenna elements in an antenna array.

45. (New) The wireless communications device of claim 41, wherein the antenna system is an integrally mounted antenna system.

46. (New) The wireless communications device of claim 41, wherein the antenna system is an externally mounted antenna system.

47. (New) The wireless communications device of claim 41, wherein the radio component comprises at least one algorithm for varying at least one operational parameter in response to the predetermined antenna characteristics.

48. (New) The wireless communications device of claim 47, wherein the predetermined antenna characteristics comprise antenna gain, and wherein the radio component algorithm sets antenna power so as to maintain antenna gain.

49. (New) The wireless communications device of claim 41, wherein the radio component and antenna system are included in at least one of a wireless access point and bridge for use with wireless local area network.

50. (New) A method of antenna operation comprising:

receiving an identification stream from an antenna serialization component;

processing the identification stream so as to identify at least one predetermined antenna characteristics;

varying at least one operational parameters of a radio component in response to the at least one predetermined antenna characteristic; and

modifying a value of the at least one antenna characteristic of the identification stream stored at the antenna serialization component responsive to a remote signal;

wherein the at least one predetermined antenna characteristic comprises a predetermined radio component operational frequency range.

51. (New) The method of claim 50, wherein the steps of processing and varying are implemented by an algorithm within the radio component.

52. (New) The method of claim 50, wherein the at least one predetermined antenna characteristic comprises a predetermined antenna component number, and wherein the at least

one operational parameter respectively comprises a command to disable the radio component if the predetermined antenna component number is not indicated.

53. (New) The method of claim 50, further comprising a step of reading predetermined antenna characteristics over a network by a network administrator in a remote location.

54. (New) A method of antenna operation comprising:

receiving an identification stream from an antenna serialization component;

processing the identification stream so as to identify at least one predetermined antenna characteristics;

varying at least one operational parameters of a radio component in response to the at least one predetermined antenna characteristic;

modifying a value of the at least one antenna characteristic of the identification stream stored at the antenna serialization component responsive to a remote signal; and

reading predetermined antenna characteristics over a network by a network administrator at a remote location.

55. (New) The method of claim 54, wherein the steps of processing and varying are implemented by an algorithm within the radio component.

56. (New) The method of claim 54, wherein the steps of processing and varying are implemented by an algorithm within the radio component.

57. (New) The method of claim 54, wherein the at least one predetermined antenna characteristic comprises a predetermined radio component operational frequency range.

58. (New) The method of claim 54 wherein the at least one predetermined antenna characteristic comprises a predetermined antenna component number, and wherein the at least one operational parameter respectively comprises a command to disable the radio component if the predetermined antenna component number is not indicated.

59. (New) An antenna system comprising:

an antenna element for transmitting and receiving signals at radio frequencies;

an antenna connector for establishing a signal connection between the antenna element and a radio component; and

an electronic serialization component for indicating at least one predetermined antenna characteristic, and adapted to read out the predetermined antenna characteristics through the antenna connector to the radio component is coupled between the antenna element and the antenna connector;

wherein the electronic serialization component is reprogrammable to allow a change of a value of the at least one predetermined antenna characteristic; and

wherein the at least one predetermined antenna characteristic comprises a predetermined radio component operational frequency range.

60. (New) The antenna system of claim 59 wherein the predetermined antenna characteristics comprises one of a group consisting of: antenna gain, product model number and type of connection.

61. (New) The antenna system of claim 60, wherein the circuit comprises a semiconductor memory chip.

62. (New) The antenna system of claim 61, wherein the circuit comprises a threshold detection circuit for detecting a predetermined voltage threshold, corresponding to a predetermined antenna gain.

63. (New) An antenna system, comprising:

means for receiving an identification stream from an antenna serialization component;

means for processing the identification stream so as to identify at least one predetermined antenna characteristics;

means for varying at least one operational parameters of a radio component in response to the at least one predetermined antenna characteristic; and

means for modifying a value of the at least one antenna characteristic of the identification stream stored at the antenna serialization component responsive to a remote signal;

wherein the at least one predetermined antenna characteristic comprises a predetermined radio component operational frequency range.

64. (New) The system of claim 63, wherein the means for processing and means for varying are implemented within the radio component.

65. (New) The system of claim 63, wherein the at least one predetermined antenna characteristic comprises a predetermined antenna component number, the system further comprising means for disabling the radio component if the predetermined antenna component number is incorrect.

66. (New) The system of claim 63, further comprising means for reading predetermined antenna characteristics over a network by a network administrator in a remote location.

67. (New) An antenna system, comprising:

means for receiving an identification stream from an antenna serialization component;

means for processing the identification stream so as to identify at least one predetermined antenna characteristics;

means for varying at least one operational parameters of a radio component in response to the at least one predetermined antenna characteristic;

means for modifying a value of the at least one antenna characteristic of the identification stream stored at the antenna serialization component responsive to a remote signal; and

means for reading predetermined antenna characteristics over a network by a network administrator at a remote location.

68. (New) The system of claim 67, wherein the at least one predetermined antenna characteristic comprises a predetermined radio component operational frequency range.

69. (New) The system of claim 67, wherein the at least one predetermined antenna characteristic comprises a predetermined antenna component number, the system further comprises means for disabling the radio component responsive to reading an invalid antenna component number.